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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/080,301

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Joseph R. Svacek

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EXAMINER

HAN, CLEMENCE S

ART UNIT

PAPER NUMBER

2616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/080,301	<b>Applicant(s)</b> SVACEK ET AL.	
	<b>Examiner</b> Clemence Han	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2007.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 February 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Drawings*

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the interface circuit between the personality module and the allocation module must be shown or the feature(s) canceled from the claim(s). The each slot having both dedicated data bits and shared data bits must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to under 37 CFR 1.83(a) because they fail to show incoming channel and outgoing channel in paragraph [0029], page 11, as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

3. The disclosure is objected to under 37 CFR 1.71, as being so incomprehensible as to preclude a reasonable search of the prior art by the examiner. For example, the following items are not understood: the whole paragraph [0029] is unclear. Especially, it is unclear where the input ports 56 and the output ports 58 are connected. And also, "allocate the bits in the set of input ports and the set of output ports (88 bits each) to the 134 bit wide bus 60" is not understood.

Applicant is required to submit an amendment which clarifies the disclosure so that the examiner may make a proper comparison of the invention with the prior art.

Applicant should be careful not to introduce any new matter into the disclosure (i.e., matter which is not supported by the disclosure as originally filed).

*Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1-3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barkley et al. (US 6,389,493) in view of Shivji et al. (US 7,054,310) and further in view of Hochschild et al. (US 5,805,589).

Regarding to claim 1, Barkley teaches an allocating device for dynamically allocating bandwidth, comprising: a plurality of personality modules 116, each of said personality modules having an independent bandwidth requirement, wherein at least two of said personality modules have different bandwidth requirements 130; an allocation module 119 connected to said personality modules by a plurality of transmission channels 134, wherein said allocation module assigns incremental bandwidths to said personality modules (Column 6 Line 42-45) based upon the bandwidth requirements of said personality modules (Column 6 Line 39-41); a microprocessor 121 connected to said allocation module 119 by a first transmission line that is adapted for programming said allocation module to assign a bandwidth corresponding to the bandwidth requirement of said personality modules (Column 3 Line 65 – Column 4 Line 1); and a multiplexer connected to said allocation module by a second transmission line (Column 3 Line 7-8) and interface circuit 122 between the plurality of personality modules and the allocation module, the interface circuit controlling the direction of data flow between the multiplexer and the plurality of personality module (Column 5 Line 6 – Column 6 Line 11). Barkley, however, does not teach explicitly a plurality of slots adapted to removably receive different personality modules, wherein each of said slots is connected to said allocation module by a separate transmission channel in said plurality of transmission channels; wherein allocation of bandwidth to said personality modules is dynamic with respect to both change in types of personality modules in said plurality of slots and changes in bandwidth requirements of each personality module at different times, and

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each personality module may reside in any slot and in any combination. Shivji teaches a plurality of slots 610 adapted to removably receive different personality modules, wherein each of said slots is connected to said allocation module by a separate transmission channel in said plurality of transmission channels; wherein allocation of bandwidth to said personality modules is dynamic with respect to both change in types of personality modules in said plurality of slots and changes in bandwidth requirements of each personality module at different times, and each personality module may reside in any slot and in any combination (Column 8 Line 43-46). It would have been obvious to one skilled in the art to modify Barkley to have each personality module may reside in any slot and in any combination as taught by Shivji in order to provide more flexible services (Column 9 Line 1-5). Barkley in view of Shivji, however, does not teach the interface circuit comprises a plurality of bits hardwired to the slots, and wherein each slot has both dedicated bits and data bits that are shared between neighboring slots. Hochschild teaches the interface circuit 350 comprises a plurality of bits hardwired to the slots, and wherein each slot has both dedicated bits and data bits that are shared between neighboring slots (Column 23 Line 16-22). It would have been obvious to one skilled in the art to modify Barkley in view of Shivji to have both dedicated bits and shared bits as taught by Hochschild in order to meet the ports' need dynamically (Column 23 Line 21-22).

Regarding to claim 2, Barkley teaches a controller 120 connected to said

microprocessor 121 and said personality modules 116 by a data lines wherein said controller obtains information from each personality modules to determine how much bandwidth to assign to said personality module for transmitting data from said personality module (Column 6 Line 39-41).

Regarding to claim 3, Barkley teaches each of said personality modules is assigned incremental bandwidths with a fixed amount (Column 6 Line 45). Barkley, however, does not teach exactly 27 Mb/s granularity. It would have been obvious to one skilled in the art to modify Barkley to use 27 Mb/s granularity as a design choice.

Regarding to claim 5, Barkley teaches said multiplexer obtains a payload from said each of said plurality of personality modules and combines said payload for transmission over a single transmission channel (Column 3 Line 6-26).

6. Claim 6-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barkley et al. in view of Shivji et al. and Hochschild et al. and further in view of Greaney et al. (Us 5,796,729).

Regarding to claim 6, Barkley teaches allocation module 119. Barkley, however, does not teach an interface circuit. Greaney teaches said interface circuit 68 comprises a set of input lines, a set of output lines and a set of dedicated bits (Column 7 Line 27-28) and wherein said interface circuit controls the direction of said payload that flows between said multiplexer and said plurality of personality modules and determines which of said output lines to transmit said payload on (Column 4 Line 48-53). It would have been obvious to one skilled in the art to modify Barkley in view of Shivji and Hochschild



to have the interface circuit as taught by Greaney in order to provide communication path between system entities (Column 4 Line 55-58).

Regarding to claim 7 and 8, Greaney teaches high speed backplane bus 68. Greaney, however, does not teach said set of input lines/output lines comprising exactly an 88-bit wide bus. It would have been obvious to one skilled in the art to modify Barkley in view of Shivji, Hochschild and Greaney to use 88-bit wide bus as a design choice.

Regarding to claim 9, Greaney teaches said set of dedicated bits carries said payload to and from said plurality of personality modules (Column 7 Line 27-28).

Regarding to claim 10, Greaney teaches said payload is high quality uncompressed video (Column 1 Line 21-27).

Regarding to claim 11, Greaney teaches said payload is high quality uncompressed audio (Column 1 Line 21-27).

Regarding to claim 12, Greaney teaches said payload is a modulated IF carrier (Column 1 Line 28-37).

Regarding to claim 13, Barkley teaches said plurality of personality modules 116 is selected from a group consisting of a transmit-only module, a receive-only module and a transceiver module (Column 3 Line 15-26).

Regarding to claim 14, Greaney teaches a front panel of said allocating device comprises a connector for connecting an external device 58 to said allocation module.

Regarding to claim 15, Greaney teaches said external device 58 is a monitor for displaying video data.

***Response to Arguments***

7. Applicant's arguments with respect to claim 1-3 and 5-15 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clemence Han whose telephone number is (571) 272-3158. The examiner can normally be reached on Monday-Friday 9 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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C.H.

Clemence Han  
Examiner  
Art Unit 2616

A handwritten signature in black ink, appearing to read 'Huy D. Vu', with a long horizontal stroke extending to the right.

HUY D. VU  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600